Frances C. Mizuno
Assistant Executive Director
San Luis & Delta-Mendota Water Authority

Testimony
Before the Subcommittee on Water and Power
Committee on Resources
Unites States House of Representatives

Hearing on Maintaining and Upgrading the Bureau of Reclamation's Facilities to Improve Power Generation, Enhance Water Supply and Keep our Homeland Secure

July 19, 2005

Mr. Chairman and members of the Committee, my name is Frances C. Mizuno, and I am the Assistant Executive Director of the San Luis & Delta-Mendota Water Authority (The Authority).

I am a Registered Civil Engineer in the State of California. I worked for the Bureau of Reclamation (Reclamation) for 7 years and 8 years with East Bay Municipal Utilities District all of which was related to operation and maintenance of water facilities. For the past 13 plus years as part of my responsibility as the Assistant Executive Director, I have managed the O&M of the federal Central Valley Project (CVP) south-of-Delta facilities on behalf of the Authority.

I compliment the Chairman and the Committee Members for holding this important and timely hearing and I sincerely appreciate the opportunity to testify today on "Maintaining and Upgrading the Bureau of Reclamation's Facilities to Improve Power Generation, Enhance Water Supply and Keep our Homeland Secure."

Background of the San Luis & Delta-Mendota Water Authority.

The Authority, which was formed under California law in 1992 as a joint powers authority, has its principal office in Los Banos, California. The Authority is comprised of 32 water agencies, each of which contracts with the United States for water supplies stored, pumped and conveyed by facilities of the Central Valley Project (CVP). The Authority's member agencies are entitled to approximately 2.5 million acre-feet of water for agricultural lands within the western San Joaquin Valley, San Benito and Santa Clara Counties, between 150,000 and 200,000 acre-feet of water for municipal and industrial uses principally with the Silicon Valley, and an additional 250,000 to 300,000 acre-feet of water for wildlife refuges for habitat enhancement and restoration activities.

The Authority has responsibility for Operation and Maintenance (O&M) of Major CVP Facilities.

There were several factors that led to contractors assuming responsibility for O&M of the facilities that serve them. These factors were reliability, costs, inefficient federal budgeting and funding mechanisms and the perceived deterioration of aging facilities. These issues coupled with the federal government's desire to downsize and privatize operations where practical and provided more than ample motivation for the change. This led to the formation of the Authority in 1992, to initiate the cooperative transfer of O&M of selected facilities that serve its member agencies. The transfer was phased in over several years. Key facilities include facilities that are used to pump and convey CVP water from the Sacramento–San Joaquin Rivers Delta to south-of-Delta water service and settlement contractors.

Facilities that the Authority has O&M responsibility for include:

Delta-Mendota Canal-	116 mile long canal completed in 1951 with maximum carrying capacity of 4600 cfs and all ancillary facilities
Tracy Pumping Plant-	pumping plant completed in 1951 with 6 pumps powered by 25,000 hp motors with pumping capacity totaling 4600 cfs.
O'Neill Pumping Plant-	pump/generating facility consisting of 6 units with 700 cfs capacity each. Each motor has a rating of 6,000 horsepower. When operating as generators, each unit has a generating capacity of about 4,200 kilowatts; and,
Other Miscellaneous Facilities-	San Luis Drain, Tracy Fish Facility (partial maintenance only), Delta Cross Channel,

Authority Accomplishments

The Authority has been operating and maintaining these facilities for over 13 years. The condition and reliability of the facilities has improved and the facilities are being operated and maintained in a more cost effective manner. Water users/contractors continue to support their expanded role. Reclamation continues to be supportive of the changes as well and acknowledges the benefits to the federal government.

Recommendation for Maintaining and Modernizing Reclamation Facilities.

The CVP was constructed and put into service by unit, with Shasta Dam placed in service in 1945 and New Melones Dam and Reservoir (the most recent major CVP facility) put into service in 1980. In all, the CVP currently consists of 20 dams and reservoirs capable of storing 11 million acre-feet of water, 11 power plants, 500 miles of major canals, 3 fish hatcheries, and assorted tunnels, conduits, power transmission grids and other facilities.

Considering the age of these facilities, it is imperative that Reclamation provide for the O&M and modernization of these existing water and power supply infrastructures. Many facilities are approaching the end of their design life, and some are well past that point. Many of these facilities need to be replaced with modern designs that provide for greater water management efficiency. Sound business practices dictate that a plan be developed to make certain that preserving these facilities is a priority.

Based on this background and our experience, we provide the following Maintenance and Modernization Program recommendations to sustain the viability of CVP facilities.

Before I begin outlining our recommended four-step plan, it is important to understand our perspective in making these recommendations. The key to success of any program requires strong leadership and a well-trained and experienced staff. Unfortunately, in the 1990's we began to observe a fundamental change and re-evaluation of Reclamation's mission, goals and objectives. Reclamation changed from an agency well known and respected for its engineering and construction expertise to a resource agency. During this time, Reclamation's O&M function became entangled in the changing mission, resulting in O&M funding becoming more competitive and the overall dilution of the O&M focus. In addition, the experienced Reclamation employees who were water and power facility experts retired and were not replaced with individuals with the same focus, or desire to provide certainty in supplying water and power supplies to its customers.

We do however believe Reclamation staff in Regional and Area Offices can play a key role in helping to find the right path to make multi-agency processes work. When strong relationships are developed between Reclamation employees and local water users, strong, cooperative and innovative solutions can be reached. Therefore, for program development and implementation, our recommendation is for joint efforts where Reclamation partners with local districts/customers to achieve the results of long-term system reliability.

A Maintenance and Modernization Program must be developed and we see it as a four-step process:

1. Development of the Maintenance and Modernization Program (Ten-Year Plan)

   Utilize water/power contractor expertise to make a thorough evaluation of the condition of key hydropower and water facilities. The inspection should be two parts with Part 1, a review of the current condition of the equipment and Part 2, an evaluation of the existing routine maintenance program. With the results of the Part 1 evaluation, Reclamation in conjunction with local contractors will develop a long-term program which will by category identify equipment/facility that requires upgrade, refurbishment and replacement. Each project should be prioritized into a ten-year schedule with cost estimates provided for each project. This Ten-Year Plan would replace the current Replacement, Additions and Extraordinary (RAX) list of projects. The Plan would be reviewed annually for changing priorities and addition of newly identified projects.

   With the results of Part 2 of the evaluation, Reclamation should begin immediately to make those necessary improvements to its routine facilities maintenance program for ongoing efficient and effective maintenance.

2. Seek and Provide Funds

Reclamation's current system of funding is through annual appropriation for O&M and its RAX project list. Within the CVP, this RAX list is a conglomerate of all RAX projects needed on CVP facilities and prioritized over a three-year accomplishment period. In addition to the federal appropriations, the CVP Power Customers have provided advanced funding for high priority power projects. Further, the Authorities that perform O&M of the conveyance facilities are direct funding the O&M cost related to these facilities. Capitalized projects for the conveyance facilities are still funded through the RAX budget.

It is my belief that many people mistakenly believe that O&M of these infrastructure assets are for the benefit of water and power users only. Whereas the fact is that these infrastructure assets are critically important and necessary for providing water to the environment as well. Therefore, where O&M funding is in competition for the limited resources, a high priority should be placed on this function to ensure that these facilities can remain in place to provide the water/power to all its beneficiaries.

With that said the current annual appropriation system does not lend itself to an effective and efficient process to plan and implement long-term programs. A guaranteed and stabilized funding source needs to be secured for funding high priority O&M activities.

We suggest the following alternative funding concepts be evaluated and considered:

- Long-term Congressional appropriation for CVP RAX funding. Assured funding for a number of fiscal years would allow for a more efficient and effective implementation of the RAX program or the ten-year plan. Implementation of a ten-year plan would be optimized if funding levels were known for the entire ten-year period.

- Use of Receipts or Revolving Fund Authority for water contractor payments.

Either of these authorities would allow the use of water contractor payments to fund RAX/capital projects jointly approved by Reclamation and the water users. Reclamation currently collects approximately $39M of CVP water user receipts per year. If Congress approved the use of these receipts (or authorized the establishment of an appropriate Revolving Fund), these receipts would be targeted solely to fund the RAX program or the ten-year plan.

- Contributed Funds Agreement authorization.

Provide the Regional Director of the Mid-Pacific Region with the authority to enter into Contributed Funds Agreements to allow the water contractors to voluntarily

advance fund specific projects. The authorization should provide that the credit for the funds advanced be applied against the contractor's deficits, or other obligations at the contractor's option. With this authority, the CVP water and power contractors may choose to provide advanced funding for specific projects so long as they select the obligation to which their advances will be credited.

3. Implement the Maintenance and Modernization Program (Ten Year Plan)

Prior to implementation of each specific project identified in the program, a determination must be made by Reclamation in consultation with its contractors whether that project should be carried out by Reclamation or turned over to the contractors for implementation. The contractors have a proven track record of accomplishing quality work on time and on budget. For projects retained by Reclamation, the contractors need to be closely involved in all aspects of the process from design, specification preparation, and contract administration, selection of contractor and construction inspection. Project Management agreements should be entered into between Reclamation and designated contractors to identify the role for each party.

Our recent experience with Reclamation's Denver Technical Center has identified capable, experienced and skilled engineers at the Technical Center. However, in order to maximize the success of the activity, we have found a need to establish a strong relationship between the design team and its customer. The customer must provide the design team a framework of expectations and budget restrictions and then continue to provide input, review and guidance throughout the entire design process.

4. Carry out an effective routine maintenance program for each of its facilities.

In the CVP, O&M of and funding for water conveyance systems have been transferred to three Water Authorities (non-federal Operating Entities) for over 10 years. It has proven to be very successful in that these facilities are fully funded, in good condition and maintained for long-term reliability. Reclamation's periodic RO&M inspections of these facilities confirm this. These Operating Entities are not burdened with the multitude of rules, regulations and policies of the federal government and therefore provides for a more efficient system to recruit and employ competent, skilled staff; to procure contracts, supplies and materials and manage all necessary programs. There are still other facilities within the CVP where O&M is still being provided by Reclamation. Therefore, wherever possible, consideration should be given to transferring O&M responsibilities to contractors. In addition, due to the success of this model, Reclamation should consider expanding this to other regions.

Other Funding Considerations.

In accordance with existing Reclamation accounting guidelines and procedures, most repairs and improvement to CVP facilities that are in service are treated as O&M expenses and recovered from the water and power contractors as the costs are incurred, no matter whether the repairs and/or improvements extends the life of the facility. In our opinion, this approach is inappropriate. We believe repair and betterment costs applicable to major facilities should be amortized over the life of the asset or the repayment period of the project, whichever is shorter.

Reclamation's current approach of recovering these costs in a one year period is overly burdensome on the water and power contractors and, in fact, leads to decisions being made on the basis of reimbursement capability as opposed to performing the work needed to ensure the reliability of water and power services to the contractors. This situation needs to be addressed in any approach taken to resolve Reclamation's aging infrastructure question.

****

In closing, I want to reiterate CVP water contractor's commitment to constructively working with Reclamation, the Department of Interior and Congress to address this issue of infrastructure maintenance and modernization. The contractors have everything to gain, as well as everything to lose, if the aging infrastructure problem is not resolved in a timely and cost effective manner. Neither the contractors nor Reclamation can afford to allow the infrastructure to fail and then attempt to bring facilities back into service in a crisis mode. So the emphasis is to have Reclamation continue and expand on partnerships with their contractors to develop and implement a Maintenance and Modernization Program. The Committee is correct is opening the dialogue on this issue now.

Thank you once again Mr. Chairman and Committee members for the opportunity to testify today.